

13.00	
	»Ontvangst en Registratie
13.30	Opening door voorzitter VKRT
13.40	LUVOMAXX CF ? a new group of resource conserving functional fillers for rubber applications »Dr. Jens Stehr
Lecture	<p>Luvomaxx CF? is the name of a group of carbon-containing functional fillers from natural deposits. In contrast to petroleum-based carbon blacks, they have the ecological advantage of requiring low levels of resources in their production and refining. Luvomaxx CF fillers are composed of plate-like carbon particles which are associated in different concentrations with cryptocrystalline silica and other minerals. The plate-like filler components are able to significantly increase the gas impermeability of air-carrying components such as inner liners for tyres, hoses, and gaskets. The morphology of LuvomaxxCF is also suitable for reducing the dynamic properties of vulcanised rubbers such as internal friction. The decreased heat generation reduces correspondingly the material fatigue in components subjected to dynamic influences. Another positive attribute of the Luvomaxx CF types is their specific density from 1.4 to 1.6 g/cm³. Compared with other mineral fillers or carbon blacks, which have considerably higher densities, Luvomaxx CF can thus help to significantly reduce the volume costs of rubber compounds. When used in combination with carbon black, the Luvomaxx CF types can be used as an internal dispersing aid to improve the distribution of the carbon black. The positive impact on the flow properties of the compound and good extrusion properties additionally lead to smooth surfaces.</p> <p>Apart from the characterisation of Luvomaxx CF fillers, the presentation also deals with the substitution of standard carbon blacks by selected CF types in guided formulations for CIIR inner liners for tyres and EPDM profile compounds and describes the results of the comparative investigations with regard to physical and application-specific aspects.</p>
14.20	Biobased tire performance and rubber process additives »Y. Verdonk, Wolfgang Pille-Wolf
Lecture	<p>The presentation will focus on two types of additives; process enhancement additives and tread enhancement additives.</p> <p>The tread enhancement additives market has grown the last decade due to changed regulations. Arizona Chemicals tread enhancement additives show optimal performance balance between wet traction improvement, rolling resistance and wear resistance (magic triangle).</p> <p>While gaining better tire properties, processability could become more challenging. Process enhancement additives could be used to improve the processability without significantly impacting the improved tire properties.</p>

15.00	Dry processed saponitic Capsil® clays as functional fillers for rubber applications
Lecture	<p>»Dr. Matthias Schellhorn</p> <p>Saprolithes are special clays from primary deposits comparable to kaolin but with different mineralogical composition. The most important characteristic of Saprolithes from the Westerwald region is an amount of roughly 50 % mica minerals. Processing such Saprolithes by dry processing enables the production of economic fillers for a wide range of applications. The Stephan Schmidt Group produces Saprolithe fillers as well as plastic clay fillers under the brand Capsil®.</p> <p>Blending Saprolithes with different raw material ? especially amendment of high plastic clays ? leads to different physical properties of the Capsil® fillers. Subsequently it is possible to produce fillers with more or less reinforcing characteristics. Different grades of grinding are possible as well. First results of Capsil® fillers in rubber applications are given in the presentation.</p>

15.40	
	»Pauze

16.00	New Additives for the Processing of Special-Application-Elastomers
Lecture	<p>»Struktol</p> <p>Schill+Seilacher ?Struktol? GmbH has introduced Struktol HT 750, a new processing additive for diamine crosslinking polymers. AEM, ACM and HNBR can be challenging to work with, as the high additive loadings necessary for processing often compromise some of the rubber?s physical properties.Struktol HT 750 was designed to overcome these negative effects, while also achieving excellent processing in both white and black filled compounds.</p> <p>Diamine crosslinking polymers are common in the automotive applications and need to perform in a very demanding environment. In this setting the compression set, the permanent deformation in a material after an applied force is removed, is one the most critical physical attributes measured. When processing with silica filler, amino-silanes are typically added to improve compression set, but negatively impact tensile strength and elongation at break. In stark contrast to the status quo, Struktol HT 750 interacts with the silica surface and improves dispersion and compression set without sacrificing elongation at break and tensile strength.</p>

16.40	Silica and silanes
Lecture	<p>»M.D. Nguyen</p> <p>The Tire Manufacturing Industry is technology driven and therefore the requirements to every single raw material in rubber compounds of tire formulations are high.</p> <p>Evonik is the only silica supplier worldwide offering also rubber silanes. With this role Evonik continuously develops new products to meet the challenges. With the high surface area silica ULTRASIL® 9100 GR and the mercapto silane Si 363TM high tire performances can be reached.</p> <p>Furthermore a look in the portfolio of Evonik shows that there is a wide variability of possible products and its combinations in order to fulfil the requests of the market.</p>

17.20	Aperitif met aansluitend diner
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